CLAIMS

1. A system for automatic generation of card-based presentation documents from multimedia data comprising:

a presentation style transformer; and

a card-based presentation generator connected to said presentation style transformer.

10   2.   A system for automatic generation of card-based presentation documents from multimedia data as claimed in claim 1 wherein said presentation style transformer comprises:

a processor for receiving a card display schema and
15   for processing said card display schema to describe meta rules about presentation resources and content variable definitions for a card-based presentation specification.

3.   A system for automatic generation of card-based
20   presentation documents from multimedia data as claimed in claim 1 wherein said presentation style transformer comprises:

a resource generator; and

a style proceduralizer.

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4.   A system for automatic generation of card-based presentation documents from multimedia data as claimed in claim 3 wherein said style proceduralizer comprises:

a card-based context tree builder;
30   a content node path walker connected to said card-based context tree builder; and

a content mapping rule generator connected to said content node path walker.

35   5.   A system for automatic generation of card-based presentation documents from multimedia data as claimed in

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claim 1 wherein said card based presentation generator comprises:

    a presentation construct mapper;

    a card-based DSSSL processor connected to said presentation construct mapper; and

    an FOD converter connected to said card-based DSSSL processor.

6. A system for automatic generation of card-based presentation documents from multimedia data comprising:

    presentation style transformer means for receiving a card layout style specification and a card display schema and for providing a card-based presentation specification; and

    card-based presentation generator means connected to said presentation style transformer means for receiving said card-based presentation specification and a card-based document content and for providing formatting object descriptions.

7. A system for automatic generation of card-based presentation documents from multimedia data as claimed in claim 6 wherein said presentation style transformer means comprises:

    resource generator means for receiving said card layout style specification and said card display schema and for providing said card-based presentation specification; and

    style proceduralizer means for receiving said card layout style specification and said card display schema and for providing said card-based presentation specification.

8. A system for automatic generation of card-based presentation documents from multimedia data as claimed in

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claim 7 wherein said style proceduralizer means comprises:

card-based context tree builder means for receiving said card layout style specification and for providing a
5   context tree;

content node path walker means connected to said card-based context tree builder means for receiving said context tree and for providing context paths; and

content mapping rule generator means connected to
10   said content node path walker means for receiving said context paths and said card display schema and for providing said card-based presentation specification.

9.   A system for automatic generation of card-based
15   presentation documents from multimedia data as claimed in claim 8 wherein said context tree captures content mapping rule context for making an efficient generation process of procedural rule mappings in CPS.

20   10.   A system for automatic generation of card-based presentation documents from multimedia data as claimed in claim 6 wherein said card based presentation generator means comprises:

presentation construct mapper means for receiving
25   said card-based presentation specification and for providing card-based DSSSL style specifications;

card-based DSSSL processor means connected to said presentation construct mapper means for receiving said card-based DSSSL style specifications and said card-based
30   document content and for providing a card-based document flow object tree; and

FOD converter means connected to said card-based DSSSL processor means for receiving said card-based document flow object tree and for providing said
35   formatting object descriptions.

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11.   A system for automatic generation of card-based presentation documents from multimedia data as claimed in claim 10 wherein said card-based document flow object tree comprises:

   a specification of a sequence of FODfo flow objects.

12.   A method for automatic generation of card-based presentation documents from multimedia data comprising the steps of

   transforming a presentation style; and
   generating a card based presentation.

13.   A method for automatic generation of card-based presentation documents from multimedia data as claimed in claim 12 wherein transforming a presentation style comprises the steps of:
   resource generating presentation resource descriptions; and
   translating declarative card layout style specifications into procedural card-based presentation specifications.

14.   A method for automatic generation of card-based presentation documents from multimedia data as claimed in claim 13 wherein translating declarative card layout style specifications comprises the steps of:
   building a card-based context tree;
   building context paths; and
   generating a content mapping rule.

15.   A method for automatic generation of card-based presentation documents from multimedia data as claimed in claim 14 wherein generating a content mapping rule comprises the steps of:

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getting a next context path;

deciding whether last path;

visiting a next node;

deciding whether end of path;

5   deciding whether node is visited before;

creating a context attribute value;

creating <DefineVAr>s for rule mapping;

creating <CaseExpr> or <IfExpr> if multiple node

types exist; and

10   deciding a node category.

16.   A method for automatic generation of card-based

presentation documents from multimedia data as claimed in

15   claim 12 wherein generating a card based presentation

comprises the steps of:

mapping CPS constructs into card-based DSSSL style

constructs;

creating card-based document flow object tree; and

20   converting card-based document flow object tree into

formatting object descriptions.